

Claims

1. A method of synthesis using a porous device comprising a body having an internal region which is porous, wherein
5 an active material is entrapped within the internal region.
2. A method according to claim 1, including the step of
10 contacting said porous device with a first reagent under conditions which cause said first reagent to react with said active material, so that a bond is formed between the active material and said first reagent (or a fragment thereof).
- 15 3. A method according to claim 1 or claim 2, which involves contacting said porous device with reagents in order to prepare a compound which is covalently bonded to the active material of the porous device.
- 20 4. A method according to any preceding claim, wherein said active material is arranged to act as a support for a compound prepared in solid phase synthesis.
- 25 5. A method according to any preceding claim, wherein said active material includes a linker or is covalently bonded to a linker in said synthesis.
- 30 6. A method according to any preceding claim, which includes the step of cleaving a compound prepared from the active material.
7. A method according to any preceding claim, wherein

material(s) which make(s) up said internal region is/are fixed in position in said internal region.

8. A method according to any preceding claim, wherein the arrangement and/or position of particles of said active material is predetermined.

9. A method according to any preceding claim, wherein said internal region is not flowable.

10. A method according to any preceding claim, wherein said internal region comprises a random network of pores which network has a substantially fixed configuration.

11. A method according to any preceding claim, wherein said porous device has a predetermined shape.

12. A method according to any preceding claim, wherein the porosity at a surface of the device is substantially the same as the porosity of the internal region adjacent said surface.

13. A method according to any preceding claim, wherein said porous device is substantially self-supporting.

14. A method according to any preceding claim, wherein said internal region of said porous device is defined by active material such that said internal region consists essentially of active material.

15. A method according to any of claims 1 to 13, wherein said porous device comprises an inert material and an active material.

16. A method according to claim 15, wherein the inert material is arranged to entrap the active material within the internal region of the device.

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17. A method according to claim 15 or claim 16, wherein said inert material defines a porous support means and said active material is arranged within pores of said porous support means.

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18. A method according to any of claims 15 to 17, wherein said active material is not covalently bonded to said porous support means.

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19. A method according to any of claims 15 to 18, wherein the active material is in the form of a multiplicity of individual particles, wherein said particles are separated from one another by said inert material.

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20. A method according to any of claims 15 to 19, wherein said inert material is a thermoplastic.

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21. A method according to any preceding claim, wherein particles of said active material are substantially spherical.

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22. A method of synthesizing a plurality of different compounds, the method using a plurality of porous devices of the type described in any of claims 1 to 21, the method including contacting a first said porous device with a first sequence of reagents and contacting a second said porous device with a second sequence of reagents wherein said first and second sequences of reagents are different,

thereby to prepare different compounds on said first and second porous devices.

23. A method according to claim 22, which is a method of
5 synthesizing N different compounds, wherein N is a
positive integer, using N porous devices, the method
including using N different sequences of reagents and
contacting said porous devices with a respective sequence
thereby to prepare respective different compounds on said
10 porous devices.

24. A method according to claim 22 or claim 23, wherein
said devices include identifying means for uniquely
identifying the devices from one another.

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25. A method of effecting an interaction between an active
material and another material (hereinafter an "interacting
material"), the method using a porous device comprising a
body having an internal region which is porous, wherein
20 said active material is entrapped within the internal
region.

26. A porous device comprising a body having an internal
region which is porous, wherein an active material is
25 entrapped within the internal region.

27. A device according to claim 26, wherein said active
material includes a linker.

30 28. A device according to claim 26 or claim 27, wherein
said device includes an identification means associated
therewith.

29. A collocation or an assembly comprising a plurality of porous devices according to claim 26.

30. A collocation or assembly according to claim
5 29, wherein each porous device includes a unique identification means.

31. A collocation or assembly according to claim 29 or
claim 30, wherein the devices support a plurality of
10 different compounds.

32. A method of synthesizing a library of compounds, the
method using a plurality of porous devices according to
claim 26 and including the step of subjecting each porous
15 device to a unique sequence of treatments and/or
reactions, thereby to prepare different compounds on the
porous devices.

33. A method of manufacturing a porous device as described
20 in any preceding claim, the method comprising causing a
body having a porous internal region to form with an
active material entrapped therewithin.

34. A method according to claim 33, which comprises co-
25 sintering particles of an inert material with particles of
an active material thereby to define the internal region
of said porous device.

35. A method according to claim 33 or claim 34, wherein
30 said active material is for use in a method of synthesis
according to any of claims 1 to 24; or is a reagent for
use in a chemical reaction; or is a catalyst for use in a
chemical reaction.

36. A substrate for use in solid phase chemistry comprising a chemically active specie bearing or containing accessible functionality and a matrix forming material.

- 5 37. The use of a substrate according to claim 36, as a substrate in solid phase chemistry.

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